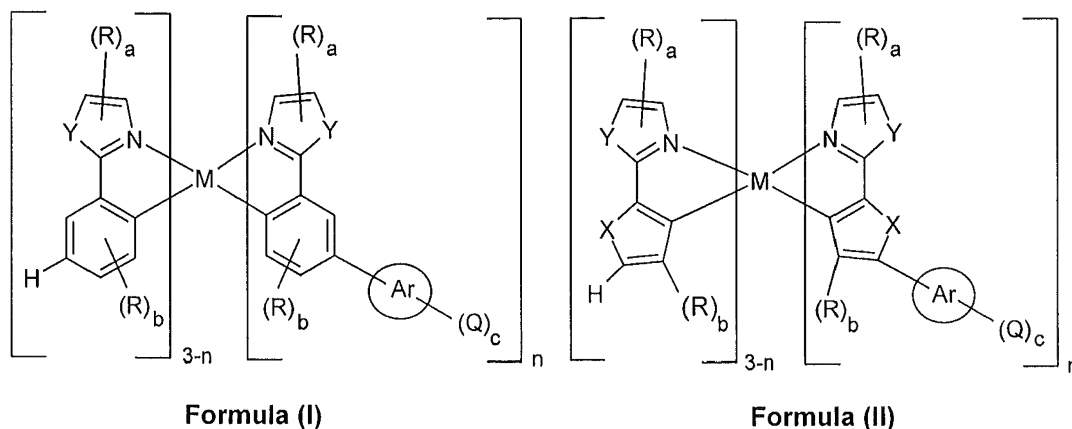


AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A compound of the formula (I) or (II),

Scheme 1



where the symbols and indices have the following meanings:

- M is Rh or Ir;
- X is O, S or Se;
- Y is S, O, R-C=C-R or R-C=N;
- R is identical or different on each occurrence and is H, F, Cl, NO₂, CN, a straight-chain or branched or cyclic alkyl or alkoxy group which has from 1 to 20 carbon atoms and in which one or more nonadjacent CH₂ groups is optionally replaced by -O-, -S-, -NR¹- or -CONR²- and one or more H atoms is optionally replaced by F, or an aryl or heteroaryl group which has from 4 to 14 carbon atoms and is optionally substituted by one or more, nonaromatic radicals R; ~~where a plurality of substituents R, either on the same ring or on the two different rings, may together form a further monocyclic or polycyclic ring system;~~
- Ar is benzene, toluene, xylene, fluorobenzene, difluorobenzene, diphenyl, ~~1,2- or 1,3- or 1,4-terphenylene~~, tetraphenylene, naphthalene, fluorene, phenanthrene, anthracene, 1,3,5-triphenylbenzene, pyrene, perylene, chrysene, triptycene, [2.2]paracyclophane, pyridine, pyridazine, 4,5-benzo-pyridazine, pyrimidine, pyrazine, 1,3,5-triazine, pyrrole, indole, 1,2,5- or 1,3,4-oxadiazole, 2,2'- or 4,4'-diazabiphenyl, quinoline, ~~carbazole~~, N-alkylcarbazole, 5,10H-dihydrophenazine,

10H-phenoxazine, N-alkylphenoxazine, N-alkylcarbazole, phenothiazine, xanthene, 9-acridine, furan, benzofuran, thiophene or benzothiophene;

Q is identical or different on each occurrence and is F, Cl, Br, I, CN, COOH, NH₂, OH, SH, NO₂, SO₃H, SiR₃ or a straight-chain or branched or cyclic alkyl or alkoxy group which has from 1 to 20 carbon atoms and in which one or more nonadjacent CH₂ groups is optionally replaced by -O-, -S-, -CO-, -COO-, -O-CO-, -NR¹-, -(NR²R³)⁺A⁻ or -CONR⁴- and one or more H atoms is optionally replaced by F, ~~or an aryl~~ or heteroaryl group which has from 4 to 14 carbon atoms and is optionally substituted by one or more, nonaromatic radicals R;

A⁻ is a singly charged anion or its equivalent;

are identical or different and are each H or an aliphatic or aromatic hydrocarbon radical having from 1 to 20 carbon atoms;

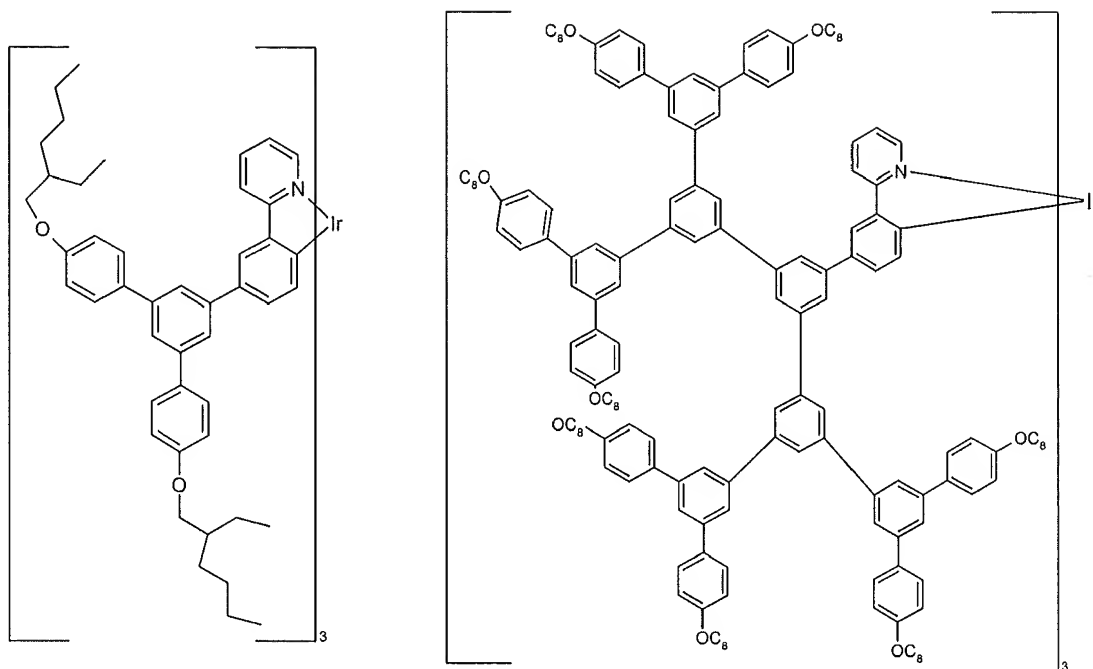
a is 0, 1, 2, 3 or 4,

b is 0, 1, 2 or 3,

c is from 0 to 15;

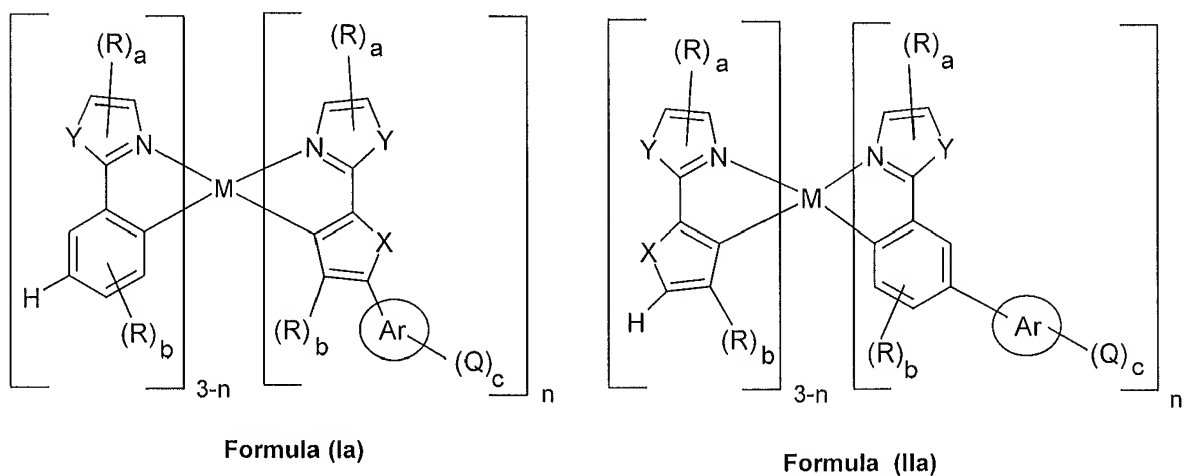
n is 1, 2 or 3;

with the exception of the compounds:



where C_8 is 2-ethylhexyl.

2. (Withdrawn) A compound of the formula (Ia) or (IIa),



where the symbols and indices have the following meanings:

M is Rh or Ir;

X is O, S or Se;

- Y is S, O, R-C=C-R or R-C=N;
- R is identical or different on each occurrence and is H, F, Cl, NO₂, CN, a straight-chain or branched or cyclic alkyl or alkoxy group which has from 1 to 20 carbon atoms and in which one or more nonadjacent CH₂ groups is optionally replaced by -O-, -S-, -NR¹- or -CONR²- and one or more H atoms is optionally replaced by F, or an aryl or heteroaryl group which has from 4 to 14 carbon atoms and is optionally substituted by one or more, nonaromatic radicals R; where a plurality of substituents R, either on the same ring or on the two different rings, may together form a further monocyclic or polycyclic ring system;
- Ar is an aryl or heteroaryl group having from 1 to 40 carbon atoms;
- Q is identical or different on each occurrence and is F, Cl, Br, I, CN, COOH, NH₂, OH, SH, NO₂, SO₃H, SiR₃ or a straight-chain or branched or cyclic alkyl or alkoxy group which has from 1 to 20 carbon atoms and in which one or more nonadjacent CH₂ groups is optionally replaced by -O-, -S-, -CO-, -COO-, -O-CO-, -NR¹-, -(NR²R³)⁺A⁻ or -CONR⁴- and one or more H atoms is optionally replaced by F, or an aryl or heteroaryl group which has from 4 to 14 carbon atoms and is optionally substituted by one or more, nonaromatic radicals R;
- A⁻ is a singly charged anion or its equivalent;
- R¹, R², R³ and R⁴ are identical or different and are each H or an aliphatic or aromatic hydrocarbon radical having from 1 to 20 carbon atoms;
- a is 0, 1, 2, 3 or 4,
- b is 0, 1, 2 or 3;
- c is from 0 to 15;
- n is 1, 2 or 3.

3. (Withdrawn) The compound as claimed in claim 1 in which the symbol Y is O or S.

4. (Previously presented) The compound as claimed in claim 1, characterized in that Y is R-C=C-R or R-C=N-.

5. (Previously presented) The compound as claimed in claim 1, characterized in that $b = 0$.

6.- 7. (Cancelled)

8. (Currently Amended) The compound as claimed in claim 1, wherein the radical Ar is benzene, toluene, xylene, fluorobenzene, difluorobenzene, diphenyl, ~~1,2- or 1,3- or 1,4-terphenylene~~, tetraphenylene, naphthalene, fluorene, phenanthrene, anthracene, 1,3,5-triphenylbenzene, pyrene, perylene, chrysene, triptycene, [2.2]paracyclophane, pyridine, pyridazine, 4,5-benzo-pyridazine, pyrimidine, pyrazine, 1,3,5-triazine, pyrrole, indole, 1,2,5- or 1,3,4-oxadiazole, 2,2'- or 4,4'-diazabiphenyl, quinoline, ~~carbazole~~, 5,10H-dihydrophenazine, 10H-phenoxazine, phenothiazine, xanthene, 9-acridine, furan, benzofuran, thiophene or benzothiophene.

9. (Currently Amended) The compound as claimed in claim 1, wherein Ar is a phenyl, ~~N-alkylcarbazole~~, N-alkylphenoxazines, phenothiazine or xanthene or a mixture thereof.

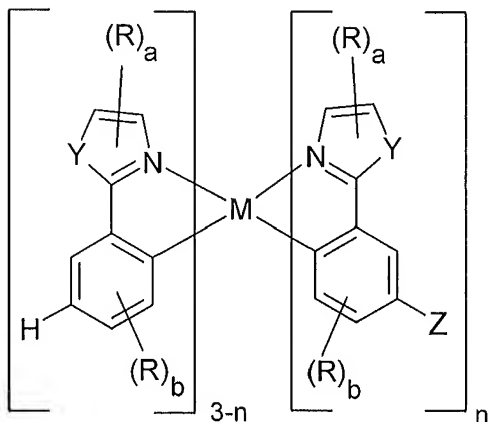
10. (Previously presented) The compound as claimed in claim 1, wherein Ar is phenyl, 1- or 2-naphthyl, 1-, 2- or 9-anthracenyl.

11. (Withdrawn) The compound as claimed in claim 1, characterized in that Q is F, Cl, Br, CN, NO₂, SiR₃ or a straight-chain or branched or cyclic alkyl or alkoxy group which has from 1 to 6 carbon atoms and in which one or more adjacent CH₂ groups optionally replaced by -CF₂-.

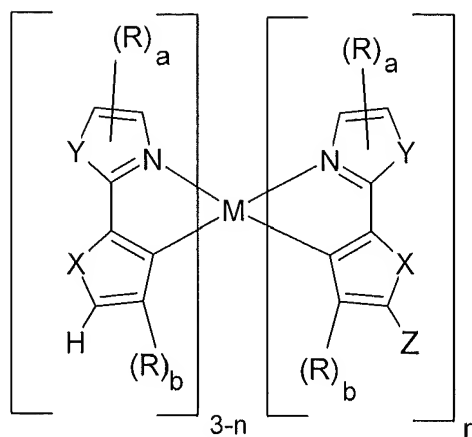
12. (Previously presented) The compound as claimed in claim 1, characterized in that M = Ir.

13. (Withdrawn) The compound as claimed in claim 1, characterized in that c is greater than or equal to 1.

14. (Withdrawn) A process for preparing compounds as claimed in claim 1, by reacting compounds of the formula (III) or (IV),



Formula (III)

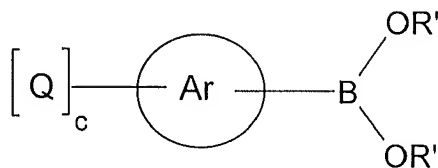


Formula (IV)

where the symbols and indices M, X, Y, R, a, b and n are as defined in claim 1, and

Z is Cl, Br or I,

with an arylboronic acid or an arylboronic ester of the formula (V)



Formula (V)

where the symbols and indices Q, Ar and c are as defined in claim 1, and:

R' is identical or different on each occurrence and is H or an aliphatic or aromatic hydrocarbon radical having from 1 to 20 carbon atoms, where a plurality of substituents R' optionally forms a monocyclic or polycyclic ring system,

in a reaction medium and in the presence of a transition metal or a transition metal compound, a phosphorus-containing or nitrogen-containing additive and a base.

15. (Previously presented) The compound as claimed in claim 1, characterized in that its purity (determined by means of ¹H-NMR and/or HPLC) is more than 99%.

16. (Withdrawn) A mixture of one or more compounds of the formula (I) and/or the formula (II) as claimed in claim 1, with an unconjugated, partially conjugated or conjugated polymer.

17. (Withdrawn) The mixture as claimed in claim 16, characterized in that the polymer is selected from the group consisting of polyfluorenes, polyspirobifluorenes, poly-para-phenylenes, polycarbazoles, polyvinylcarbazoles, polythiophenes and copolymers comprising a plurality of the units mentioned here.

18. (Withdrawn) The mixture as claimed in claim 16, characterized in that the polymer is soluble in organic solvents.

19-21 (Cancelled)

22. (Withdrawn) An electronic component comprising a compound as claimed in claim 1.

23. (Withdrawn) An organic electroluminescence and/or phosphorescence device which comprises the compound as claimed in claim 1.

24. (Withdrawn) An emission layer which comprises the compound as claimed in claim 1.

25. (Withdrawn) A solar cell or photovoltaic device which comprises the compound as claimed in claim 1.

26. (Withdrawn) The solar cell or photovoltaic device as claimed in claim 25, wherein the solar cell or photovoltaic device is an organic photodetector, an organic solar cell, in organic integrated circuits, in an organic field effect transistor, in an organic thin film transistor or in an organic solid-state laser.